

REMARKS

Reconsideration of the application at this stage favorable to the allowance of claims would of course be appreciated. In any event, entry of this amendment to facilitate an appeal is believed clearly in order.

Sec. 112 Issues Are Removed

In the final action, a new rejection under Sec. 112, second paragraph, was made of claim 49 (new claim 63) regarding the term "principally comprises". We do not agree that any such relative term in the present context makes the claim indefinite under the statute. However, to obviate the issue, the claim as rewritten merely deletes "principally" from the term. Now the claim is to be construed more generally as to the amount of the indicated material.

In reviewing claim 49 (now 63) it was further noted (third clause after the colon) the term "is formed principally of" was used. Based on similar considerations, applicants are changing that term to "comprises".

In review of others of the claims, the following similar terms were found and are accordingly amended:

In each of claims 6 (new 58), 17 (new 69), 24 (allowed), and 51 (new 65) - "principally" is deleted; and

In claim 8 (new 60) - "is formed principally of" is changed to "comprises".

None of these amendments raises a new issue and they may instead clarify the claim language (even though they are not believed required under Sec. 112). Patentability of the claims over the art is believed clearly present with, as well as without, such amendments.

An incidental amendment is also made in allowed claim 28; the referred to "joint" is mentioned in base claim 27.

Status of Claims Is Unclear

The rejection of claims 2, 5-12, 15, 17-20, 31, 33, 34, 39, 40, and 48-51 over Demissy in view of Cline is understood to apply to new claims 55-75, 80 and 81 (numbered in different order) and the rejection of claims 35, 38, 41, 42 and 44-47 over Demissy in view of Cline and Outlaw is understood to apply to new claims 76, 79, and 82-87 (respectively). As such, there is no stated basis for a rejection of either claim 36 or 37 (new claims 77 and 78). Their allowance or withdrawal of the final rejection or, at least, clarification of the record, is requested.

Remarks on the Examiner's Response to Arguments

Ample arguments for allowance of all the claims appear in Applicants' Reply to the first action and will not be recopied here. They apply to the corresponding claims as now presented and it is requested the Examiner reconsider them.

In addition, applicants submit the following remarks that are directed to the Examiner's "Response to Arguments" in the final action.

No reasonable interpretation of Cline suggests or implies anything with "strands" and "interstitial sites". The relation the Examiner contends for the "ribbon" and "epoxy substrate" of Cline to the claimed strands and location of adhesive is contrary to the plain meaning of the terms. That establishes lack of prima facie obviousness as

to claims with such limitations in the various claimed combinations.

With regard to the Examiner's contentions of motivation to combine references, it is true a motivation should be found in any of (1) the references themselves, (2) the nature of the problem to be solved, or (3) knowledge of one of ordinary skill in the art. However, the Examiner has not presented any coherent relation of any of these factors to the present combination of widely disparate references. The case law is clear that it is the PTO's burden to establish a prima facie case of obviousness. The present record lacks any such showing based on any of the stated factors or anything else. Such references are only selected based on an effort (although not a successful effort) to find pieces of relevant structures only after one has the benefit of the present disclosure; pure hindsight rather than any of the required factors, and without due consideration of the claims' subject matter as a whole.

It is not relevant to anything in Demissy that Cline has "a fiber glass rod coated with a conductive carbon coating and cured at high temperature...[for] a highly predictable and stable resistance element". That is not support for the motivation to combine and it is mere speculation on the Examiner's part how the element Cline discloses and Cline's notions of qualities such as "highly predicable and stable", "relatively low coefficient of thermal expansion" and what is "integrity over a wide range of temperatures" relate any disclosure of Cline to Demissy or anything similar to Demissy's switch.

The Examiner's contention that "the limitations in these claims [9-12, new claims 61, 62, 66 and 67] are broad enough to read on [a] combination of Demissy and Cline" is

puzzling and unsupportable. For example, limitations in claims 61 and 62 include, among others in combination,

"...a first rod in a rod assembly with at least a second tapered rod located within a part of the first rod and the rods have blunt ends at a common axial position".

This aspect does not appear to be squarely addressed in either the first or final action and is not found in either Demissy or Cline. (Applicants have also shown how the third reference to Outlaw fails to supply the deficiencies of Demissy and Cline.)

Limitations of claims 62, 66 and 67 include, in combination with other features,

"...a substantially all-metal rod portion having an end joined with...the rod assembly with the conductive path on the first rod of the rod assembly conductively connected with the all-metal rod",

as in claim 62, and

"...a...flexible member including first and second parts...; the first part being of substantially all-metal material; the second part having a different composition than the first part...; the first and second parts each having an electrically conductive surface forming a continuous conductive path along the outside of the joined parts with the conductive path exteriorly exposed for contact along its length"

as in claims 66 and 67. In the actions of record, an erroneous contention is made that Cline has a two-part rod (22 and 20) with "conductive outer surface, and both are in

contact with each other". The gap in Cline's structure is mentioned by the Examiner but without explanation of any basis for modifying it to form a continuous path when the clear teaching of the reference is to have a gap. This is a classic example of a reference (Cline) teaching away from the art of another reference (Demissy), to which it is supposedly combined, that clearly requires a contrary structure.

Both in the original rejection and the added comments, there is lack of the requirements for a proper rejection based on obviousness. The basic requirements of a prima facie case of obviousness are set out in MPEP§2143 and its several subsections. On the present record, none of the three basic criteria are shown to be met, even individually, let alone all together as is necessary. MPEP§2142 makes clear

"The Examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the Examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness".

That is the present situation. The discussion of features of various claims by applicants is to make clearer that prima facie obviousness is lacking, hence applicants have no burden to submit evidence of nonobviousness.

Rejected Claims' Subject Matter

While neither the number of rejected claims (33) or, particularly, the number of independent claims (4) is unduly large, the following outline is intended to help in any reconsideration, without in any way implying all claims

in a particular referred to category are alike but merely as an aid in organizing the claims for more expeditious consideration.

In their broader aspects the rejected claims can be said to be of two types:

I. Claims directed to a "conductive whip-like contact structure" without calling for a combination with other contacts. Such claims broadly include independent claim 55, with dependent claims 56-65, and independent claim 66, with dependent claims 67-73.

II. Claims directed to "An air break switch" that includes a whip of particular structure and a latch that conductively engages the whip in switch operation. Such claims broadly include independent claim 74, with dependent claims 75-81, and independent claim 82, with dependent claims 83-87.

Each of the claims in both types I and II have particularly described structure of a whip contact and claims of type II each call for some kind of particular relation of parts of the whip and the latch. These characteristics may be generally referred to as follows for general claim organization, (again, without implying all the claims referred to together are the same but merely to indicate these have something in common among their varied combinations of claimed features; and also without implying that other terms of claims, not referred to here, should be ignored):

A. Whip contact with conductive strands on the surface bonded by adhesive at interstitial sites: claims 55-65 and 70. (See, e.g., Figs. 16 and 17.)

B. Whip comprising two distinct rod parts or surface conductors but with a continuous conductive path:

claims 62, 64-73, 80, 81, 86 and 87. (See, e.g., Figs. 8, 10-12 and 15.) A sub-category (B') includes particular features of a joint with a metal spine between two parts of a whip: claims 64, 65, 67-70 and 73. (See, e.g., Figs 15-17.)

C. Whip having surface conductor(s) of the group consisting of any of a metal braid, foil, sheath, or wire: claims (in addition to those mentioned in A above) 74-81, and 84. (See, e.g., Figs. 4-9 and 15-17).

D. Whip with, at least at a tip end, a rod assembly of multiple rods. Claims 61-65, 69, 70, 77-79, and 82-87. (See, e.g., Figs. 2A, 2B, 3, and 15-17.)

E. Whip and latch arrangements with whip parts engaging latch parts in some particular manner in switch operations: All of the claims of type II to an air break switch (74-87) include some limitation with respect to the character of the whip part last to separate from that latch in a switch opening. (See, e.g., Figs. 13, 14A, 14B, 14C, 18A, 18B, 18C, 18D and 19A and 19B.) A sub-category (E') includes claims that further define the character of the latch as having a latch wheel that engages the whip during switch opening: claims 76, 79, and 85. A further sub-category (E'') has other particular ways the whip and latch relate in a switch opening or closing: claims 80, 81, 86, and 87.

These are various example aspects of the claims that are mentioned to help in reconsideration. Most of the claims under rejection have two or even more of the described characteristics in their respective combinations and all the claims should be considered based on the subject matter as a whole.

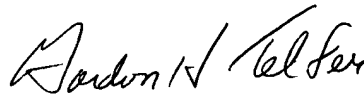
Request for Examiner's Amendment

The Examiner's attention is again drawn to applicants' request for updating the references to copending applications on pages 1 and 4 of the specification, as expressed on page 18a of the previous Reply.

Summary

Reconsideration and allowance of the application is requested or, if any rejection is maintained, entry of this amendment for appeal purposes, preferably along with some clarification of the basis for rejection.

Respectfully submitted,



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